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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NORTON, JENNIFER L	

ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,613	LIETZAU, KLAUS	
	Examiner	**Art Unit**	
	JENNIFER L. NORTON	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The following is a **Final Office Action** in response to the Amendment received on 28 January 2010. Claims 1-20 were previously cancelled. Claims 21-36 are pending in this application.

Response to Arguments

2. Applicant's arguments, see Remarks pgs. 6-9, filed 28 January 2010, have been fully considered but they are not persuasive.

3. In regards to Applicant's argument that U.S. Patent Publication No. 6,171,055 (hereinafter Vos) does not teach, "a conversion device configured to superimpose, on the output variables of the controllers, an input control component that is a function of an actual value to calculate the correcting variables" (see Remarks, pg. 7, paragraph 2), the Examiner recognizes the Applicant has not accounted for the combination of Vos and Applicant's Admitted Prior Art under 35 U.S.C 103(a) for this limitation as set forth in the Non-Office Action, mailed on 29 September 2009.

4. Applicant argues that Applicant's Admitted Prior Art fails to teach, "a conversion device configured to superimpose, on the output variables of the controllers, an input control component that is a function of an actual value to calculate the correcting variables." The examiner respectfully disagrees.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

> Furthermore, Applicant's Specification discloses "In the article by Harold L. Wade, entitled "Inverted Decoupling: A Neglected Technique," Advances in Instrumentation and Control, Instrument Society of America, Vol. 51, pp. 357 to 369 (1996), and in U.S. Pat. No. 5,403,074, **a controlled multivalue system having a controlled multivalue system is described, the controlled multivalue system having several correcting variables as input variables and several controlled variables as output variables, having several comparators for ascertaining control deviations, having several controllers, to each controller one control deviation being able to be supplied as input variable, and having a conversion device whose input variables are the output variables made available by the controllers, the conversion device calculating the correcting variables for the controlled multivalue system at least from the output variables of the controllers.** In the article by Axel Graeser, entitled "Cross-Profile Control in the Paper Industry--Sensors and Actuators as Determining Elements of the Control Quality," Automatisierungstechnik (Automation Technology), Oldenbourg Verlag, Vol. 45, pp. 271 to 281 (1997), a control method is described that has decoupling of the individual loops and a compensation of the system or path coupling." (pg. 1, par. [0009])

Hence, Applicant's disclosed limitation of "a conversion device configured to superimpose, on the output variables of the controllers (i.e. the controlled multivalue system having several correcting variables as input variables), an input control component that is a function of an actual value (i.e. a conversion device whose input

variables are the output variables made available by the controllers) to calculate the correcting variables (i.e. the conversion device calculating the correcting variables for the controlled multivalue system at least from the output variables of the controllers)" is meet by Applicant's disclosed Admitted Prior Art.

5. The Examiner has clarified the rejection of claims 21-36 with respect to Applicant's Admitted Prior Art.

6. Claims 21-36 stand rejected under 35 U.S.C 103(a) as set forth below.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 21-24, 27-29 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,171,055 (hereinafter Vos) in view of Applicant's Admitted Prior Art.

9. As per claim 21, Vos teaches a multivalue control system, comprising:

a controlled multivalue system (col. 5, lines 24-29 and Fig. 1) including a plurality of correcting variables as input variables (col. 6, lines 1-8 and 13-19) and a plurality of controlled variables as output variables (col. 5, lines 65-67);

a plurality of controllers (col. 7, lines 2-8 and 10-15 and Fig. 2, element 66 and 68);

a plurality of comparators (Fig. 2) configured to ascertain control deviations and to supply a control deviation to each controller as an input variable (col. 7, lines 2-15); and

Vos does not expressly teach to a conversion device, input variables of the conversion device corresponding to output variables of the controllers, the conversion device configured to calculate, at least from the output variables of the controllers, the correcting variables, the conversion device configured to superimpose, on the output variables of the controllers (col. 7, lines 2-8 and 10-15), an input control component that is a function of an actual value to calculate the correcting variables (col. 6, lines 1-8 and 13-19).

However, it would have been known to those of at least ordinary skill in the field of multivalue/multivariable control systems to have used the tools at hand, specifically a conversion device, input variables of the conversion device corresponding to output variables of the controllers, the conversion device configured to calculate, at least from the output variables of the controllers, the correcting variables, the conversion device

configured to superimpose, on the output variables of the controllers, an input control component that is a function of an actual value to calculate the correcting variables, since at the time of Applicant's invention was shown to be known in the art wherein a controlled multivalue system having several correcting variables as input variables and several controlled variables as output variables, having several comparators for ascertaining control deviations, having several controllers, to each controller one control deviation being able to be supplied as input variable, and having a conversion device whose input variables are the output variables made available by the controllers, the conversion device calculating the correcting variables for the controlled multivalue system at least from the output variables of the controllers (pg. 1, par. [0009]), as taught by Non-Patent Literature "Inverted Decoupling: A Neglected Technique" and in U.S. Patent No. 5,403,074 which has been cited in the Summary section of Applicant's Disclosure, to provide enhanced stability of the control system.

10. As per claim 22, Vos teaches as set forth above the conversion device is configured to calculate the correcting values by an offset of the output variables of the controllers against each other (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency).

11. As per claim 23, Vos teaches as set forth above the conversion device is configured to offset the output variables of the controllers as a function of the

controlled multivalue system (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency).

12. As per claim 24, Vos teaches as set forth above a first controlled variable conversion device (Fig. 1, element 30), the controlled variables arranged to be supplied to the first controlled variable conversion device as input variables (col. 6, lines 1-8 and 13-19), the first controlled variable conversion device configured to ascertain output variables from the controlled variables and to supply the output variables to the comparators (Fig. 2) as first input variables (col. 7, lines 2-8).

13. As per claim 27, Vos teaches a method for controlling a controlled multivalue system, comprising:

supplying a plurality of correcting variables to the controlled multivalue system (col. 5, lines 24-29 and Fig. 1) as input variables (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency);

offsetting a plurality of controlled variables against one another as output variables of the controlled multivalue system to ascertain control deviations (col. 7, lines 2-15);

supplying each control deviation to a respective controller (Fig. 2, element 66 and 68) as an input variable (col. 7, lines 2-15);

supplying output variables from the controllers as input variables (col. 6, lines 1-8 and 13-19); and

calculating the correcting variables at least from the output variables from the controllers (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-15), the calculating including offsetting the output variables of the controllers against each other using an input control component that is a function of an actual value (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-15).

Vos does not expressly teach supplying output variables from the controllers to a conversion device as input variables (col. 6, lines 1-8 and 13-19); and calculating the correcting variables in the conversion device at least from the output variables from the controllers (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-15), the calculating including offsetting the output variables of the controllers against each other using an input control component that is a function of an actual value (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-15).

However, it would have been known to those of at least ordinary skill in the field of multivalue/multivariable control systems to have used the tools at hand, specifically supplying output variables from the controllers to a conversion device as input variables; and calculating the correcting variables in the conversion device at least from the output variables from the controllers, the calculating including offsetting the output variables of the controllers against each other using an input control component that is

a function of an actual value, since at the time of Applicant's invention was shown to be known in the art wherein a controlled multivalue system having several correcting variables as input variables and several controlled variables as output variables, having several comparators for ascertaining control deviations, having several controllers, to each controller one control deviation being able to be supplied as input variable, and having a conversion device whose input variables are the output variables made available by the controllers, the conversion device calculating the correcting variables for the controlled multivalue system at least from the output variables of the controllers (pg. 1, par. [0009]), as taught by Non-Patent Literature "Inverted Decoupling: A Neglected Technique" and in U.S. Patent No. 5,403,074 which has been cited in the Summary section of Applicant's Disclosure, to provide enhanced stability of the control system.

14. As per claim 28, Vos teaches as set forth above ascertaining the correcting variables in accordance with the offsetting of the output variables of the controllers against each other (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency).

15. As per claim 29, Vos teaches as set forth above supplying the controlled variables of the controlled multivalue system to a first controlled variable conversion device as input variables (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-8);

ascertaining output variables by the first controlled variable conversion device from the controlled variables (col. 7, lines 2-8); and

supplying the output variables ascertained by the first controlled variable conversion device to comparators as first input variables (col. 7, lines 2-8).

16. As per claim 32, Vos teaches a method for controlling a propeller power unit, comprising:

controlling a propeller speed and a propeller performance as controlled variables (col. 5, lines 65-67 and col. 6, lines 13-24);

supplying a propeller blade angle of incidence (i.e. the curves of the map are characterized by a function of pitch angle) and a fuel stream (the curves of the map are characterized by a function of fuel consumption) to the propeller power unit as correcting variables (col. 7, lines 24-30);

supplying output variables from controllers as input variables (col. 6, lines 6-8);

ascertaining the propeller blade angle of incidence (i.e. the curves of the map are characterized by a function of pitch angle) and the fuel stream (the curves of the map are characterized by a function of fuel consumption) as the controlled variables from the output variables from the controllers (col. 6, lines 6-8 and col. 7, lines 2-15) ;

offsetting the output variables from the controllers against each other (col. 7, lines 15-19); and

offsetting the output variables from the controllers using an input control component that is a function of an actual value (col. 6, lines 6-8 and col. 7, lines 2-19).

Vos does not expressly teach supplying output variables from controllers to a conversion device as input variables (col. 6, lines 6-8); ascertaining, by the conversion device, the propeller blade angle of incidence (i.e. the curves of the map are characterized by a function of pitch angle) and the fuel stream (the curves of the map are characterized by a function of fuel consumption) as the controlled variables from the output variables from the controllers (col. 6, lines 6-8 and col. 7, lines 2-15) ;

offsetting, in the conversion device, the output variables from the controllers against each other (col. 7, lines 15-19); and

offsetting, in the conversion device, the output variables from the controllers using an input control component that is a function of an actual value (col. 6, lines 6-8 and col. 7, lines 2-19).

However, it would have been known to those of at least ordinary skill in the field of multivalue/multivariable control systems to have used the tools at hand, specifically supplying output variables from controllers to a conversion device as input variables; ascertaining, by the conversion device, the propeller blade angle of incidence and the fuel stream as the controlled variables from the output variables from the controllers; offsetting, in the conversion device, the output variables from the controllers against each other; and offsetting, in the conversion device, the output variables from the

controllers using an input control component that is a function of an actual value, since at the time of Applicant's invention was shown to be known in the art wherein a controlled multivalue system having several correcting variables as input variables and several controlled variables as output variables, having several comparators for ascertaining control deviations, having several controllers, to each controller one control deviation being able to be supplied as input variable, and having a conversion device whose input variables are the output variables made available by the controllers, the conversion device calculating the correcting variables for the controlled multivalue system at least from the output variables of the controllers (pg. 1, par. [0009]), as taught by Non-Patent Literature "Inverted Decoupling: A Neglected Technique" and in U.S. Patent No. 5,403,074 which has been cited in the Summary section of Applicant's Disclosure, to provide enhanced stability of the control system.

17. Claims 25, 26, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vos in view of Applicant's Admitted Prior Art in further view of U.S. Patent No. 5,951,608 (hereinafter Osder).

18. As per claim 25, Vos does not expressly teach a second controlled variable conversion device, setpoint values of the controlled variables configured to be supplied to the second controlled variable conversion device as input variables, the second controlled variable conversion device configured to ascertain output values from the

setpoint values and to supply the output values to the comparators as second input variables.

Osder teaches a second controlled variable conversion device (Fig. 6, element 524), setpoint values (Fig. 6, element 522) of the controlled variables configured to be supplied to the second controlled variable conversion device as input variables (col. 10, lines 48-59), the second controlled variable conversion device configured to ascertain output values from the setpoint values and to supply the output values to the comparators (Fig. 6, element 520) as second input variables (col. 10, lines 40-47 and col. 11, lines 4-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include a second controlled variable conversion device, setpoint values of the controlled variables configured to be supplied to the second controlled variable conversion device as input variables, the second controlled variable conversion device configured to ascertain output values from the setpoint values and to supply the output values to the comparators as second input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

19. As per claim 26, Vos does not expressly teach the comparators are configured to offset the first input variables against corresponding second input variables and to supply control deviations resulting from the offset to the controllers as input variables.

Osder teaches the comparators (Fig. 6, element 520) are configured to offset the first input variables (col. 10, lines 40-45) against corresponding second input variables and to supply control deviations resulting from the offset to the controllers as input variables (col. 11, lines 4-10 and 32-35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include the comparators are configured to offset the first input variables against corresponding second input variables and to supply control deviations resulting from the offset to the controllers as input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

20. As per claim 30, Vos does not expressly teach supplying setpoint values of the controlled variables to a second controlled variable conversion device as input variables; ascertaining output variables by the second controlled variable conversion device from the setpoint values; and supplying the output variables ascertained by the

second controlled variable conversion device to the comparators as second input variables.

Osder teaches supplying setpoint values (Fig. 6, element 522) of the controlled variables to a second controlled variable conversion device (Fig. 6, element 524) as input variables (col. 10, lines 48-59); ascertaining output variables by the second controlled variable conversion device from the setpoint values (col. 10, lines 40-59); and supplying the output variables ascertained by the second controlled variable conversion device to the comparators (Fig. 6, element 520) as second input variables (col. 10, lines 40-47 and col. 11, lines 4-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include supplying setpoint values of the controlled variables to a second controlled variable conversion device as input variables; ascertaining output variables by the second controlled variable conversion device from the setpoint values; and supplying the output variables ascertained by the second controlled variable conversion device to the comparators as second input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

21. As per claim 31, Vos does not expressly teach offsetting the first input variables of the comparators and corresponding second input variables of the comparators against each other; and supplying control deviations resulting from the offsetting of the first input variables of the comparators and the corresponding second input variables of the comparators to the controllers as input variables.

Osder teaches offsetting the first input variables of the comparators (Fig. 6, element 520) and corresponding second input variables of the comparators against each other (col. 10, lines 40-45); and supplying control deviations resulting from the offsetting of the first input variables of the comparators and the corresponding second input variables of the comparators to the controllers as input variables (col. 11, lines 4-10 and 32-35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include the first input variables of the comparators and corresponding second input variables of the comparators against each other; and supplying control deviations resulting from the offsetting of the first input variables of the comparators and the corresponding second input variables of the comparators to the controllers as input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

22. Claims 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vos in view of Applicant's Admitted Prior Art in further view of U.S. Patent No. 6,856,039 (hereinafter Mikhail).

23. As per claim 33, Vos teaches supplying the propeller speed and the propeller performance (col. 5, lines 65-67 and col. 6, lines 13-24) as the correcting variables of the propeller power unit to a first controlled variable conversion device as input variables (col. 7, lines 24-30); and

outputting, by the first controlled variable conversion device, as output variables, actual values (col. 6, lines 6-8 and col. 7, lines 2-19).

Vos does not expressly teach output variables actual variables for the propeller speed and a turbine output.

Mikhail teaches output variables actual variables for the propeller speed and a turbine output (col. 5, lines 45-52).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant’s invention to modify the teaching of Vos to include output variables actual variables for the propeller speed and a turbine output to provide maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (col. 20, lines 10-13).

24. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vos in view of Applicant's Admitted Prior Art in further view of Mikhail and Osder.

25. As per claim 34, Vos does not expressly teach supplying setpoint values for the propeller speed and the propeller performance to a second controlled variable conversion device as input variables; and outputting, by the second controlled variable conversion device, setpoint values for the propeller speed and the turbine output.

Mikhail teaches supplying setpoint values for the propeller speed (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67) and the propeller performance (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3).

Mikhail does not expressly teach supplying setpoint values to a second controlled variable conversion device as input variables; and outputting, by the second controlled variable conversion device, setpoint values for the output.

Osder teaches supplying setpoint values (Fig. 6, element 522) to a second controlled variable conversion device (Fig. 6, element 524) as input variables (col. 10, lines 48-59); and outputting, by the second controlled variable conversion device, setpoint values for the output (col. 10, lines 40-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant’s invention to modify the teaching of Vos to include supplying setpoint values for the propeller speed and the propeller performance to provide

maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (Mikhail: col. 20, lines 10-13); and supplying setpoint values to a second controlled variable conversion device as input variables; and outputting, by the second controlled variable conversion device, setpoint values for the output to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (Osder: col. 2, lines 2-6).

26. As per claim 35, Vos does not expressly teach ascertaining corresponding control deviations from the actual values and corresponding setpoint values for the propeller speed and the turbine output; supplying the propeller speed control deviation to a speed controller; and supplying the turbine output control deviation to a power controller.

Mikhail teaches ascertaining corresponding control deviations from the actual values and corresponding setpoint values for the propeller speed (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67) and the turbine output (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3); supplying the propeller speed control deviation to a speed controller (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67); and supplying the turbine output control deviation to a power controller (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include ascertaining corresponding control deviations from the actual values and corresponding setpoint values for the propeller speed and the turbine output; supplying the propeller speed control deviation to a speed controller; and supplying the turbine output control deviation to a power controller to provide maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (col. 20, lines 10-13).

27. As per claim 36, Vos teaches wherein the propeller blade angle of incidence and the fuel stream are ascertained in the propeller blade angle of incidence (i.e. the curves of the map are characterized by a function of pitch angle) and the fuel stream (the curves of the map are characterized by a function of fuel consumption) ascertaining step in the conversion device (col. 6, lines 6-8 and col. 7, lines 2-15).

Vos does not expressly teach outputting a torque request as an output variable by the speed controller; and outputting a turbine output request as an output variable by the power controller; wherein the propeller blade angle of incidence and the fuel stream are ascertained in the propeller blade angle of incidence and the fuel stream ascertaining step in the conversion device from the torque request and the turbine output request.

Mikhail teaches outputting a torque request as an output variable by the speed controller (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67); and

outputting a turbine output request as an output variable by the power controller (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3);

wherein the parameters are ascertained in the parameter ascertaining step in the conversion device from the torque request (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67) and the turbine output request (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include outputting a torque request as an output variable by the speed controller; and outputting a turbine output request as an output variable by the power controller; wherein the parameters are ascertained in the parameter ascertaining step in the conversion device from the torque request and the turbine output request to provide maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (col. 20, lines 10-13).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER L. NORTON whose telephone number is (571)272-3694. The examiner can normally be reached on Monday-Friday between 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert DeCady/
Supervisory Patent Examiner
Art Unit 2121

/JLN/